

# "Project Hawk" GPS Tracking & Information System Web Browser Software User Manual

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# **Contents**

1.0	Getting Started	5	
2.0	Tracking Vehicles On A Map Screen		
3.0	Map Display Zoom and Pan Functions		
4.0	Vehicle Activity Status	9	
5.0	Vehicle Position Status Information	10	
6.0	Individual Vehicle Map Viewer	10	
7.0	The Position Grid	13	
8.0	Fleet Management Reports	14	
8.1	Position Report	15	
8.2	Journey Report	16	
8.3	Journey Summary Report	18	
8.4	Stop Time Report	19	
8.5	Stop Time Summary Report	20	
8.6	Stationary Report	21	
8.7	Driver Report	22	
8.8	Geofence Report	23	
8.9	Off Road Geofence Report	24	
8.10	) Messaging Report	25	
8.11	Polling Report	26	
8.12	2 Customisable Reports	27	
9.0	Replay Journey	30	
10.0	Messaging	31	
10.1	Message Inbox	31	
10.2	2 Message Outbox	31	
10.3	3 Unsent Items	32	
10.4	Compose And Send A Message	32	
11.0	Geofences	33	
11.1	View Existing Geofences	34	
11.2	2 Creating Geofences	35	
12.0	Viewing and Claiming Alerts	37	
13.0	Defining Alerts	39	
14.0	Email Templates	42	
15.0	User Allocations and Passwords	43	
16.0	Event Codes – Report Id Code	44	

17.0	Driver	Manager	45
		nistrator – Fleet Management	
18.1	Cor	mpany/Organisation Details	46
18.2	Flee	et & GPS Device Details	46
18	3.2.1	Modifying Properties of Existing Devices – Vehicle Name and Details	47
18	3.2.2	Modifying Properties of Existing Devices – Device Details & Calibrations	48
18.3	Cus	tomer Details – Relates to vehicle ownership and email alerts	50
18.4	Sof	tware Users – Defining Usernames and Passwords	52

### 1.0 **Getting Started**

Go to the IntelliTrac website at www.intellitrac.com.au

Enter Your Username, Password and select a Portal specific to your country or industry type.



IntelliTrac is a 100% Australian owned company which has been providing leading edge GPS Telematics Solutions & Job Dispatch Solutions to Small Business, Corporate and Government Departments since 1987.

At Intellitrac we are extremely thorough with each and every customer implementation.

We hold your hand from the time you place your order, during the installation of each GPS Tracker in each vehicle, to the time your staff are fully trained.

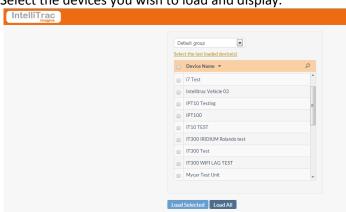
We then provide ongoing support thereafter.

At IntelliTrac, our clients are our partners, and we know that by fully understanding their business and contributing to their success, we build our own. We value the long term relationships we have developed with existing clients, and set out to build lasting relationships with all our clients.

# **GPS Tracking Login** Username: Password Portal New Application LOGIN Forgot Password? Online Accounts Portal Register/Login i-Dispatch Login LOGIN iPhone & Android Apps App Store

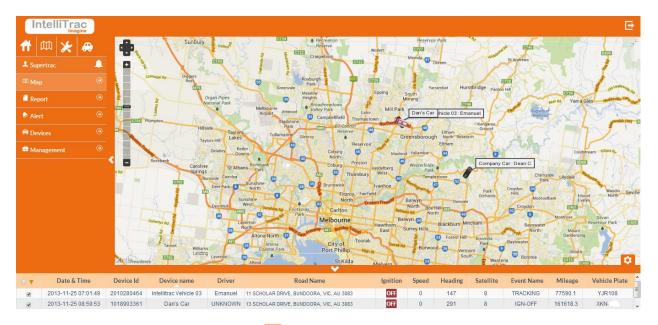
The following will be displayed.

Select the devices you wish to load and display.

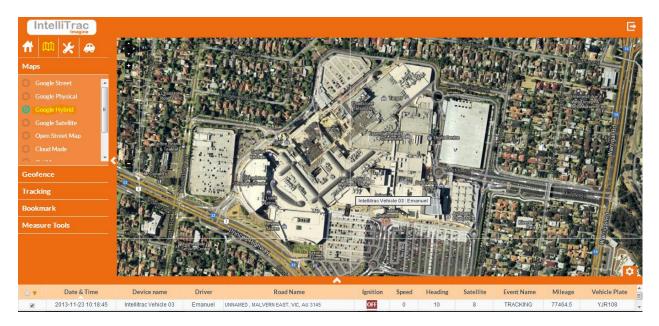


Please note:- Once the software has loaded and displayed devices a map then "Logout" is required to reload a new range of devices.

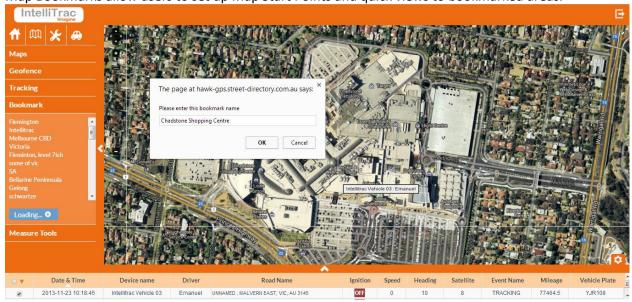
### The following screen will display.



# To view a different map please select the icon and select the Map to display. (see below)



Map Bookmarks allow users to set up Map Start Points and quick views to bookmarked areas.



# 2.0 Tracking Vehicles On A Map Screen

Click on a vehicle in the table below the map to centre it on the screen.



For "Real Time" tracking updates, please select the screen refresh period in the Tools -> Setting Menu.



# 3.0 Map Display Zoom and Pan Functions

Zoom in using the bar graph or (-) (+) symbols.

The map will always zoom to the selected vehicle or the centre of the map.

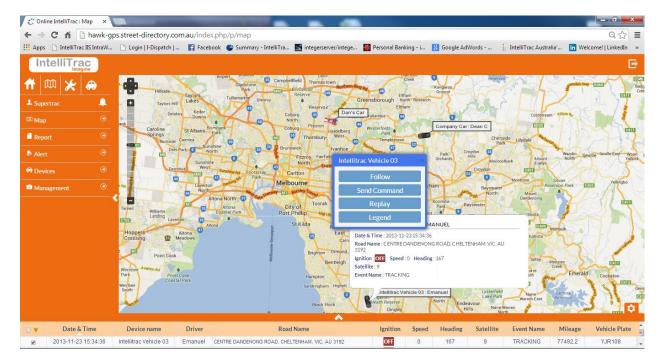


### 4.0 Vehicle Activity Status

Vehicle Status may be defined by customisable ICONS

Mouse over the vehicle icon on the map (opens information bubble)

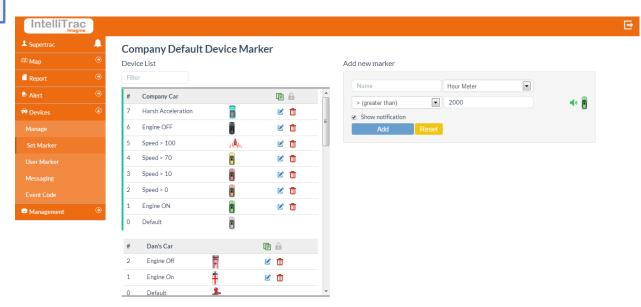
Click on the vehicle icon on the map and a Blue window will open. Then click "Legend"



Intellitrac Vehicle 03 icons

Default
Engine ON
Speed > 0
Speed > 10
Speed > 70
Speed > 70
Speed > 100
Engine OFF

The legend describes the device ICON. These legends are fully customisable for each device.



# **5.0** Vehicle Position Status Information

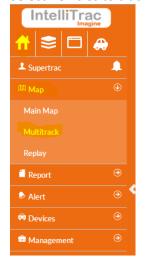
Mouse Over a vehicle (on the map) to gather information in a bubble.

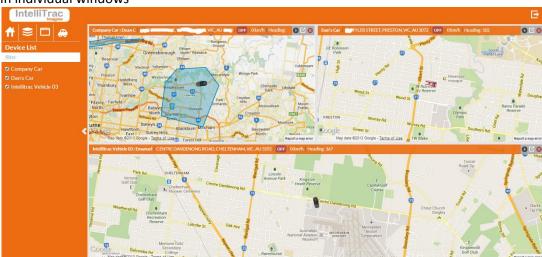


# 6.0 Individual Vehicle Map Viewer

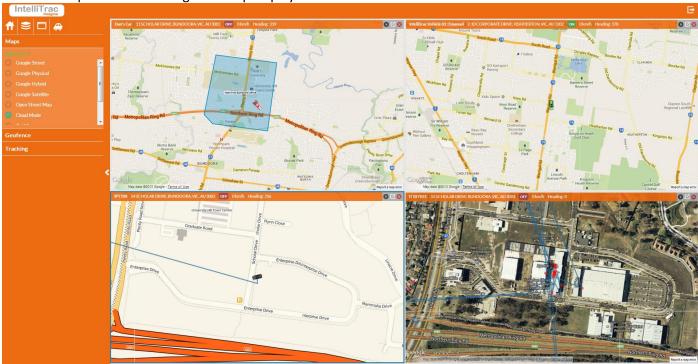
Click on Home -> Map -> Multi track.

Select Vehicles to track in individual windows

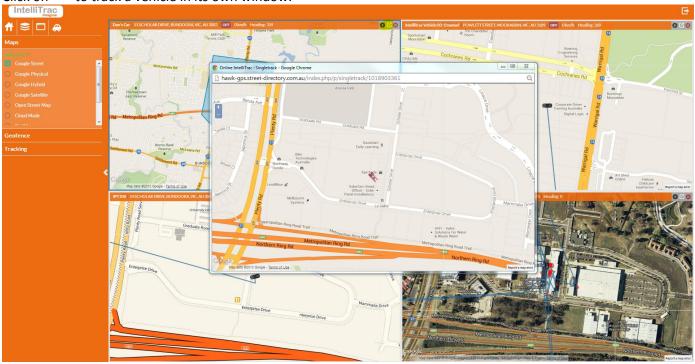




Click on "Maps" menu to change the map display of each individual window.



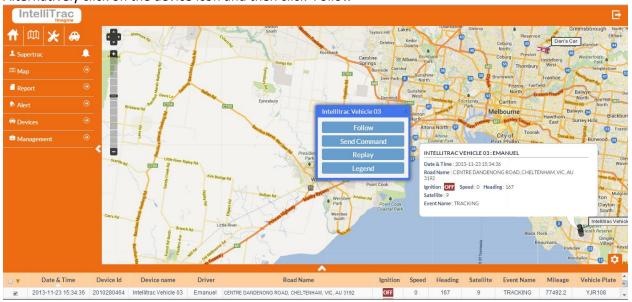
Click on to track a vehicle in its own window.



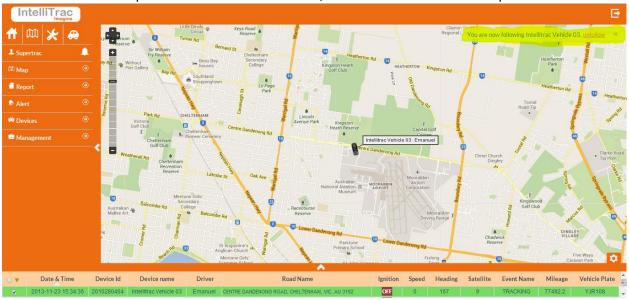
Click to open a window to replay the devices journey (See Section 9 Replay Journey)



### Alternatively click on the device icon and then click Follow

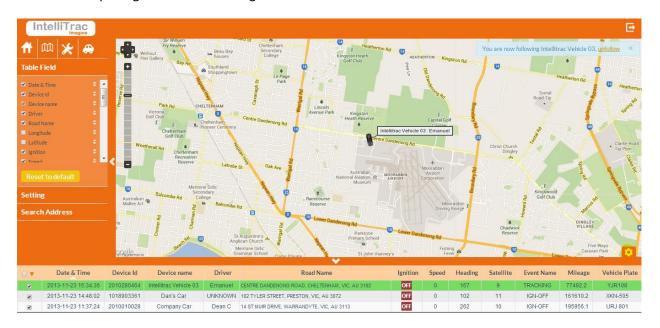


The device will be highlighted in the Position grid below the map and a message will be displayed in the upper right hand corner of the map. Whenever the device moves, it will be centered on the map.



### 7.0 The Position Grid

Below the map image is a table showing the Date and Time and last known location and related data of each vehicle.

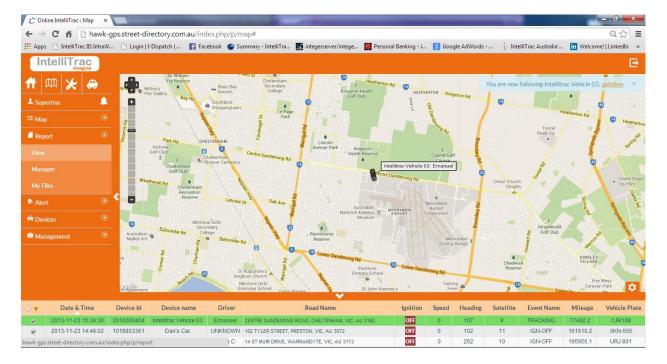


This table may be customised by clicking the and selecting which column are to be displayed. Columns may be sorted in alphanumerical order and position.

- Date&Time Last known date and time that the device reported a position.
- Device Id The electronic serial number of the device.
- Device name The name of the device.
- Driver The driver of the vehicle.
- Road Name The last known closest resolvable address of the vehicle if on a public road.
- Speed Speed of the vehicle in KPH
- Heading Heading degrees clockwise from North
- Satellites Satellite Reception >3 means valid location
- Mileage Odometer reading of the vehicle in kilometres Requires Calibration and setup.
- Input The GPS can monitor 4 inputs. These are displayed as a binary mask\* from 0-16
- Output The GPS can monitor & control 4 outputs. These are displayed as a binary mask\* from 0-16
- Analog1 Analog1 can read a voltage signal from a transducer and convert it to a meaningful value such as temperature, pressure, weight etc. (Not normally used)
- Analog2 Analog2 can read a voltage signal from a transducer and convert it to a meaningful value such as temperature, pressure, weight etc. (Not normally used)

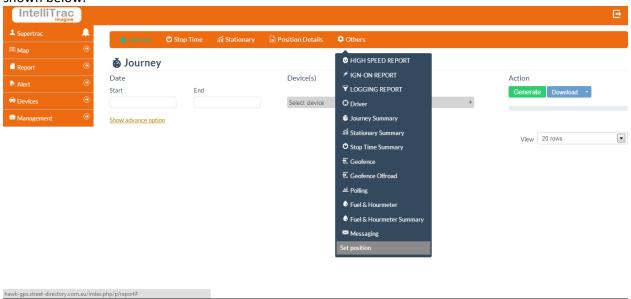
## 8.0 Fleet Management Reports

Click on REPORT -> View to open the Fleet Management Reports Menu



A screen similar to the following will be displayed.

It is important to note that reports can now be fully customisable and your display may not appear exactly as the one shown below.



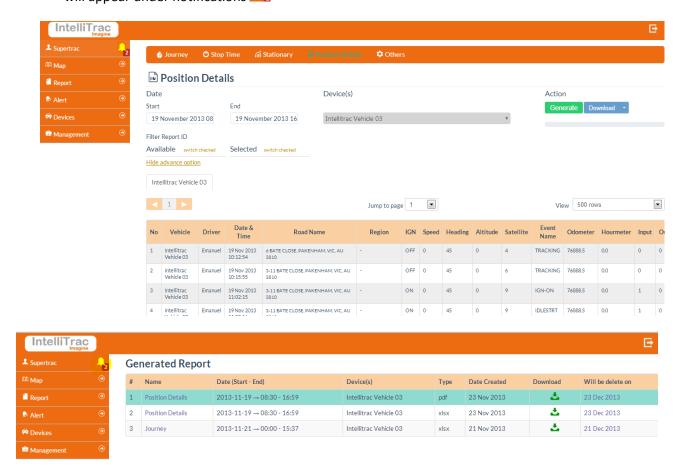
### 8.1 Position Report

The Position report lists each polled position along with all captured data relating to connected vehicle transducers such as street sweeper timers and water usage in flush trucks.

See section 7 for the explanation of each column.

To generate a detailed report:-

- 1. Select a time and date range
- 2. Select a device from the drop down list
- 3. Select the number of records per page
- 4. Generate the report
- 5. All reports may be printed, exported to PDF and Spread sheet using the download button. Downloaded items will appear under notifications

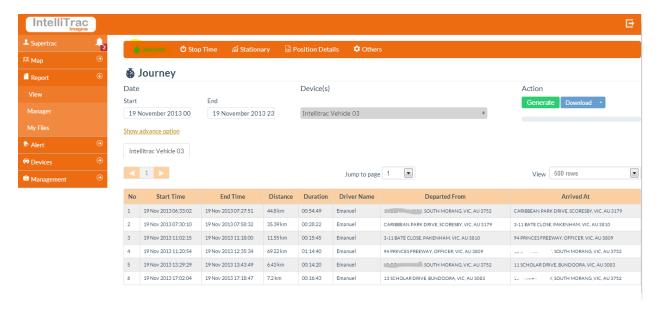


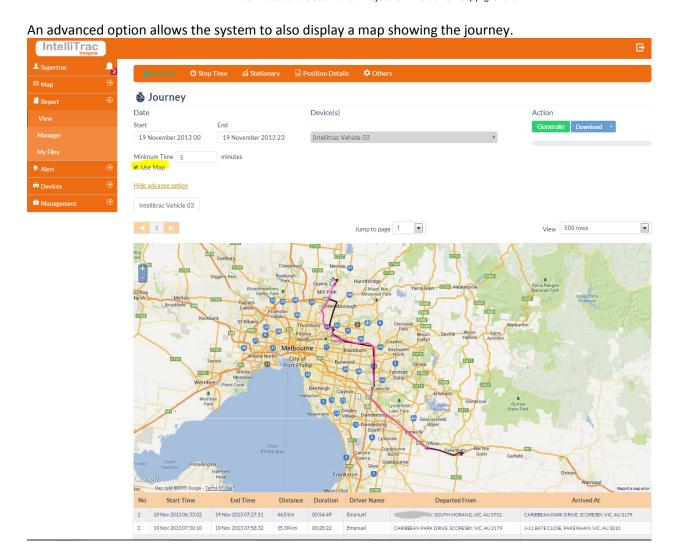
### 8.2 Journey Report

This report combines Journey Time and Distance

To generate a Journey Report:-

- 1. Select a time and date range
- 2. Select a Device
- 3. Generate the report
- 4. All reports may be printed, exported to PDF, Excel and CSV



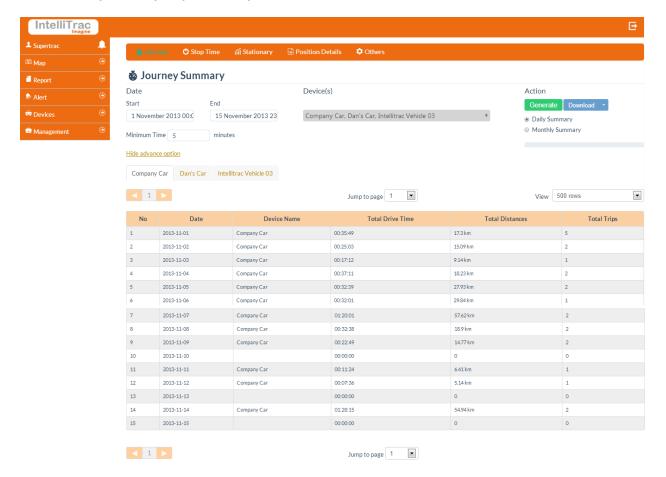


### 8.3 Journey Summary Report

This report combines Journey Time and Distance and summarises on a daily or monthly report for one or more devices

### To generate a Journey Report:-

- 1. Select a time and date range
- 2. Select one or more devices
- 3. Generate the report
- 4. All reports may be printed, exported to PDF, Excel and CSV

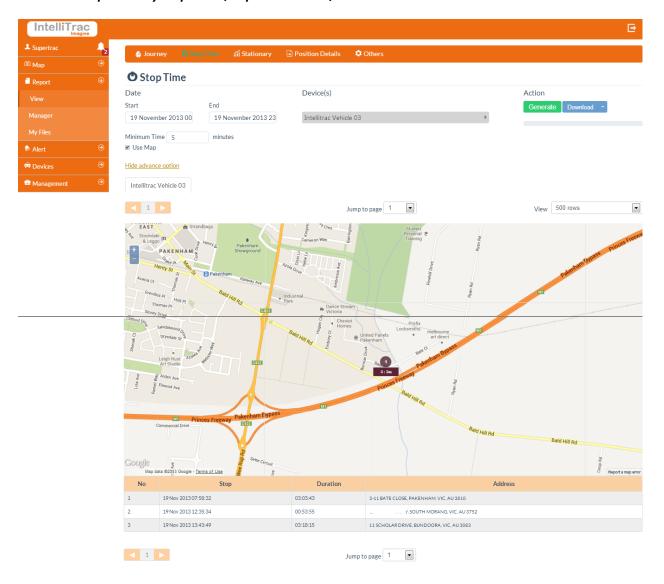


### 8.4 Stop Time Report

The Stop Time report provides quick and easy information as to where, when and how long the vehicle stopped (with ignition off).

### To generate a Stop Time Report:-

- 1. Select a time and date range
- 2. Select a Device
- 3. Generate the report
- 4. All reports may be printed, exported to PDF, Excel and CSV

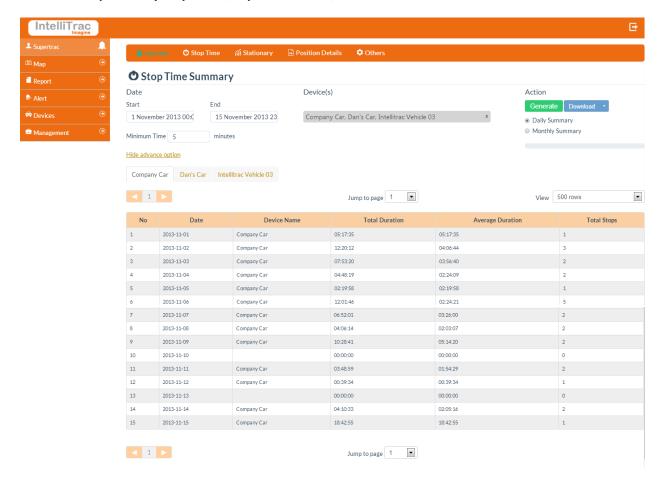


### 8.5 Stop Time Summary Report

The Stop Time Summary report provides quick and easy information as to where, when and how long the vehicle stopped (with ignition off).

### To generate a Stop Time Report:-

- 1. Select a time and date range
- 2. Select one or more devices
- 3. Generate the report
- 4. All reports may be printed, exported to PDF, Excel and CSV

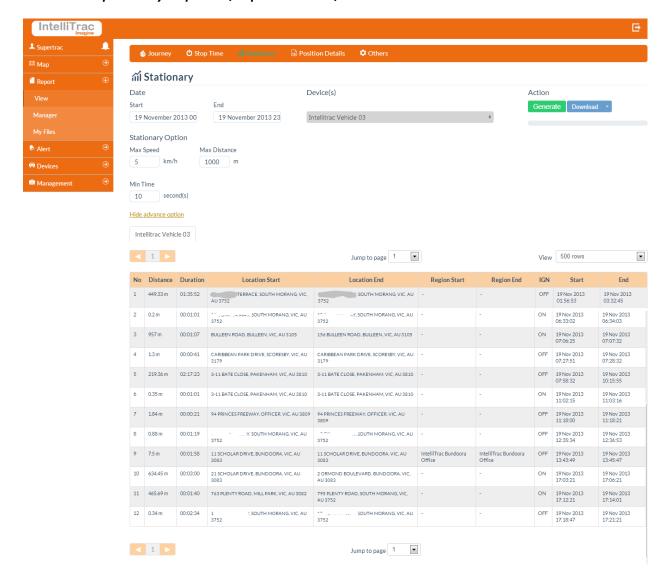


### 8.6 Stationary Report

The Stationary report provides quick and easy information as to where and when the vehicle was stationary with engine on or off or moving slowly in traffic.

### To generate a Stationary Report:-

- 1. Select a time and date range
- 2. Define what you consider a stationary period..the example below indicates that a stationary period is considered when the vehicle is travelling at 5 kph (or less) for more than 10 seconds for a maximum distance of 1km.
- 3. Select the device
- 4. Generate the report
- 5. All reports may be printed, exported to PDF, Excel and CSV



### 8.7 Driver Report

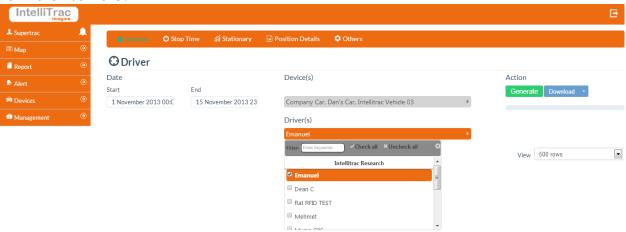
The Driver Report details trip information based on driver rather than vehicle. This report allows queries based on the selection of one or more vehicles and one or more drivers.

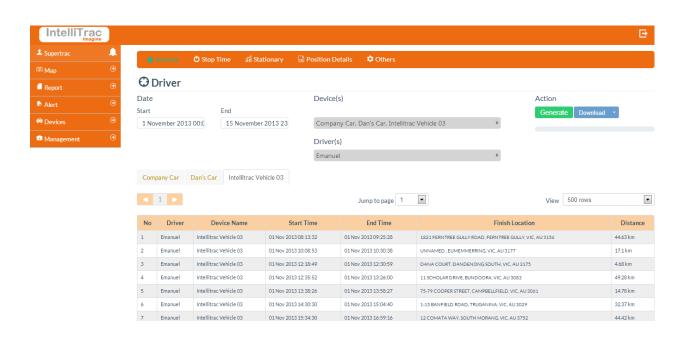
### For example:-

Which drivers were driving this vehicle on a certain day?

Which vehicles were being driven by this driver on a certain day?

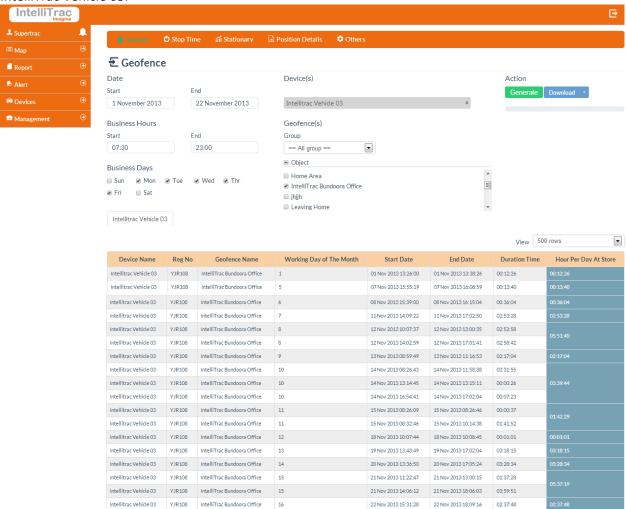
See a typical report below:- Which vehicles was Emanuel was driving on the between the 1<sup>st</sup> November 2013 and the 15<sup>th</sup> November 2013?





### 8.8 Geofence Report

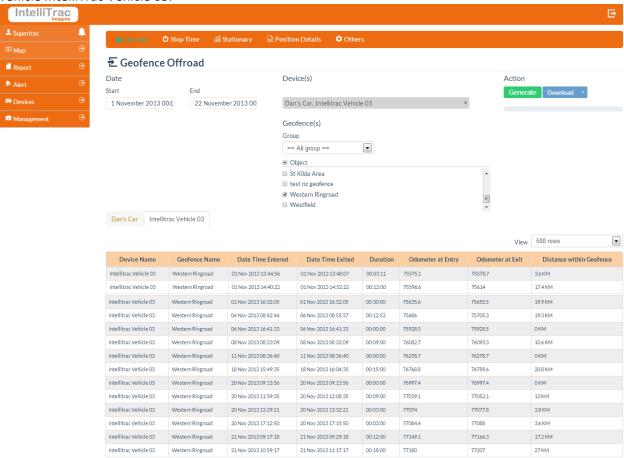
The Geofence Report provides information on time spent by one or more vehicles in one or more locations. See below a query for time spent at IntelliTrac Office between the 1<sup>st</sup> Nov 2013 to 22<sup>nd</sup> November 2013 for vehicle IntelliTrac Vehicle 03.



### 8.9 Off Road Geofence Report

The Off Road Geofence Report provides information on time spent and distance travelled by one or more vehicles in one or more locations. This information may be used to claim rebates when vehicles are driven in certain geographical areas.

See below a query for the Western Ring Road geofence between the 1<sup>st</sup> Nov 2013 to 22<sup>nd</sup> November 2013 for vehicle IntelliTrac Vehicle 03.



### 8.10 Messaging Report

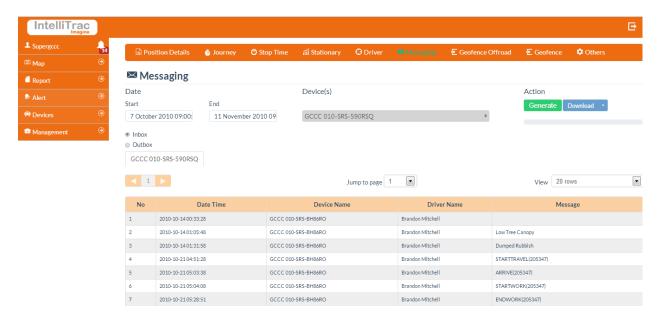
The Messaging report lists all incoming or outgoing messages.

These messages will include

- General two way text messages
- Maintenance Messages
- Job Diversion Status Messages

### To generate a Messaging Report:-

- 1. Select a time and date range (max 90 days)
- 2. Select one or more devices
- 3. Select Incoming or Outgoing Messaging
- 4. Select Records Per Page
- 5. Generate the report
- 6. All reports may be printed, exported to PDF, Excel and CSV



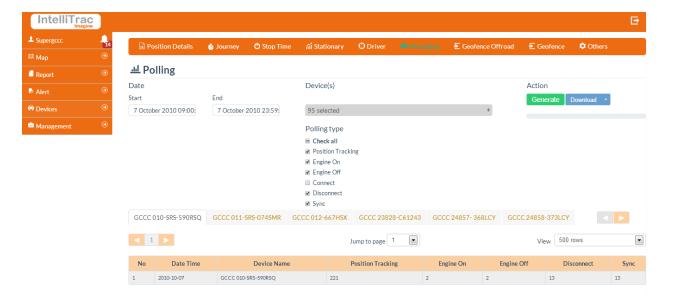
### 8.11 Polling Report

The Polling Report provides a method of reporting on the "health" of each device. The report may be generated as a normal report or an exception report.

**The Normal Report** identifies device activity such as connectivity to the IntelliTrac Data Centre, Handshaking information, Ignition On/Off and positions.

See example below on the 7<sup>th</sup> October 2010

- Sent 221 positions. (this can identify devices which using too much data...for example >1000 positions)
- Engine was Started 2 times. (This can identify poor installation where the system cannot detect engine starts)
- Engine was Stopped 2 times. (This should be the same value as Engine Started)
- Connect 13 times. (This indicates the GSM network connectivity and reliability in the area)
- Disconnect 13 times. (Should be same value as Connect)
- Sync. 13 times (Indicates Network Validation Handshakes Should be same or slightly greater than Connect)



### 8.12 Customisable Reports

Reports may be customised to suit individual requirements.

### To customise a report

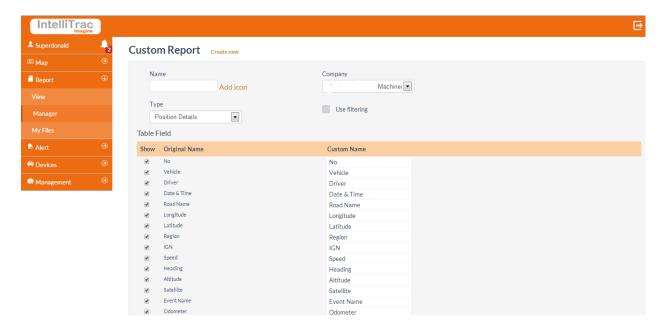
Click on "Report" -> "Manager" -> "Create new"



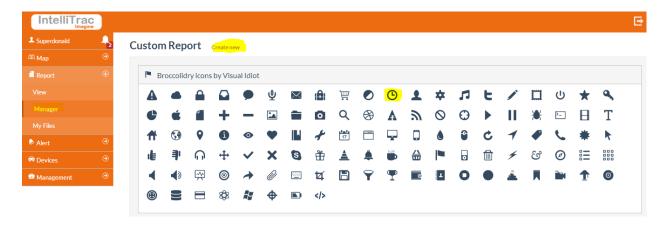
Click "Add Icon" to select an icon to easily identify the report.

Enter a report name

Select a report template "Type"



Select an Icon from the list displayed



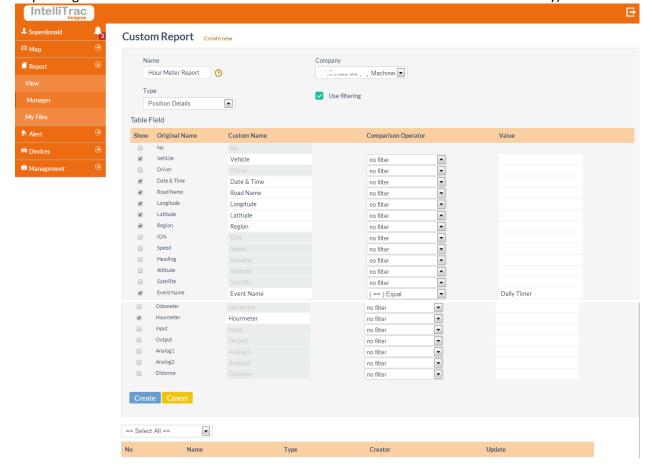
In the example below, we will define an Hour Meter report.

The report will be based on the "Position Detail" report template.

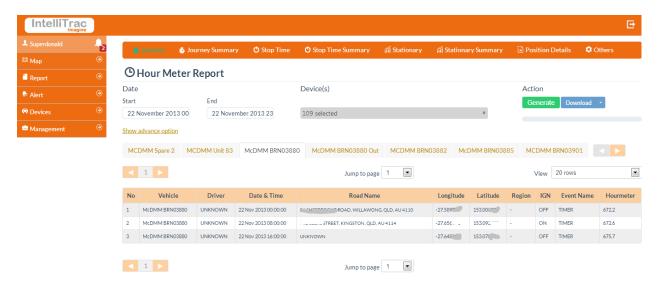
We will select the information to be displayed in the columns of the report

We will filter the report to only display the event Daily Timer. (The Daily Timer is a command sent to the device

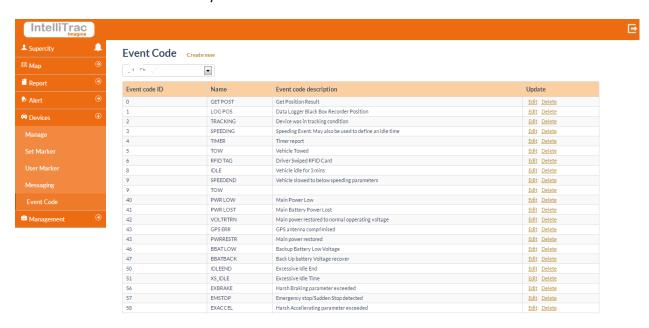
requesting that information is sent to the IntelliTrac Data Centre at a certain time each day)



### The following is an example report.



### NB: Event Name information may be found at: - "Devices" -> "Event Code"

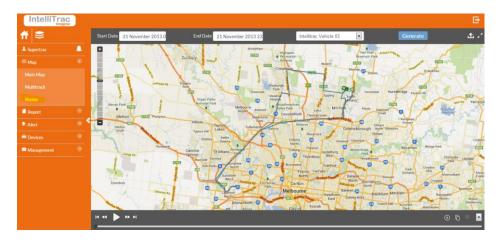


# 9.0 Replay Journey

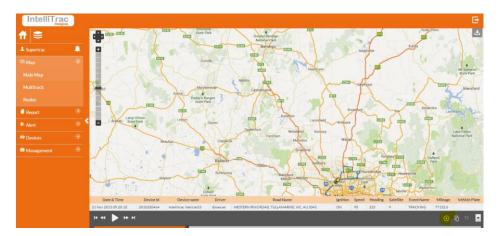
The Replay Journey Menu provides a snap shot of vehicle travelling patterns as well as a step by step of all vehicle activity during a given period of time.

### To generate a vehicle replay:-

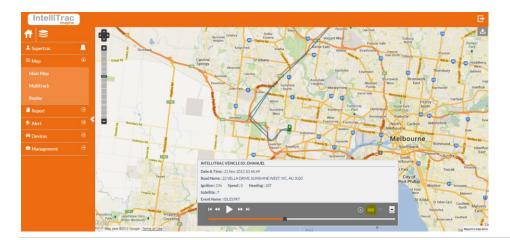
- 1. Select a time and date range
- 2. Select a Device
- 3. Click Generate Data
- 4. Control Buttons at the bottom of the map are used to play/pause the vehicle replay.



Click on the to display information bar.



Click on the  $\blacksquare$  to display information bar.



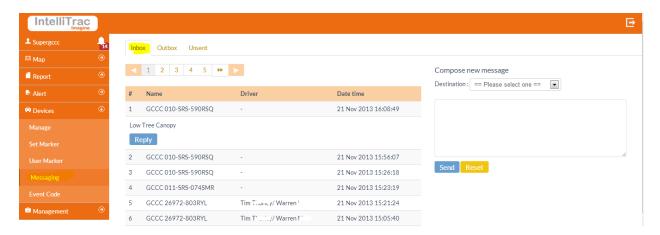
### 10.0 Messaging

The Intellitrac system provides a method of two way text messaging between the Base (any office computer) to the Vehicle (via a mobile data terminal integrated with the GPS Tracking device)

By Selecting Messaging a variety of options are available.

### 10.1 Message Inbox

By Selecting INBOX a list of all incoming messages are displayed. By Clicking on an incoming Message, the message is displayed

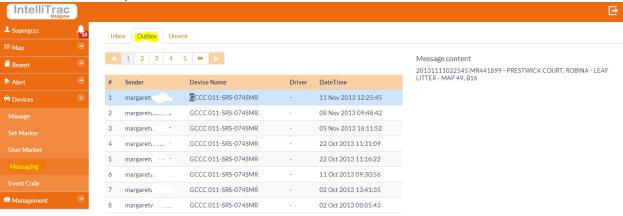


### 10.2 Message Outbox

By Selecting OUTBOX a list of all outgoing messages are displayed. By Clicking on an outgoing Message, the message is displayed.

All Messages are displayed including:-

Normal 2 way Text Chats



### 10.3 Unsent Items

By Selecting UNSENT a list of all outgoing messages which are yet to be successfully delivered to a vehicle are displayed.

All Messages are displayed including:-

Normal 2 way Text Chats



### 10.4 Compose And Send A Message

To Compose and Send a message from any PC to any vehicle or broadcast messages to groups of up to 10 vehicles:-

- 1. Select "Compose new message" from the right hand menu
- 2. Select one or more vehicles in the Destination dropdown list
- 3. Type the message in the Message box
- 4. Click Send Message



### 11.0 Geofences

Geofences provide a means of defining an area on a Map. For example defining all parks, depots, and car parks.

Once geofences are defined, the geofence information may be used as a condition to generate reports and alerts.

### For example:-

- Send an email if a vehicle enters the geofence
- Generate a report showing how many times we have been to a location.

### To create or view geofences, Click Geofence

The following screen will be displayed. (Ensure the Switch is set to ON)

You will notice that geofences may be created for each Company (or fleet)

Each Company may then group their geofences. For example a group for Clients and another group for Suppliers.



### 11.1 View Existing Geofences

# To view existing geofences select the geofence from the drop down list

The screen below will show the geofence centred on the map.

It will also show a list of vehicles allocated to the geofence.

For example:- A Sales Rep vehicle may only be required to report on clients and a purchasing officer's vehicle may only be required to report on suppliers.

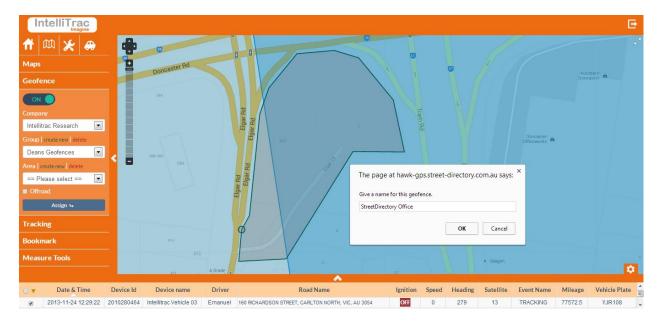


### 11.2 Creating Geofences

### To Create A Geofence Click "Create New"



- Use the Mouse Left Button to click all points of the geofence (except the last point to close the geofence).
- To close the geofence "Double Click" the Mouse Button.
- Enter a Name for the Geofence



### To Allocate the Geofence to one or many vehicles

- Select the Geofence in "Area"
- Click "Assign" in left hand side menu
- Select the vehicles to assign in the Blue Pop up
- Click "Assign" (in the blue popup)



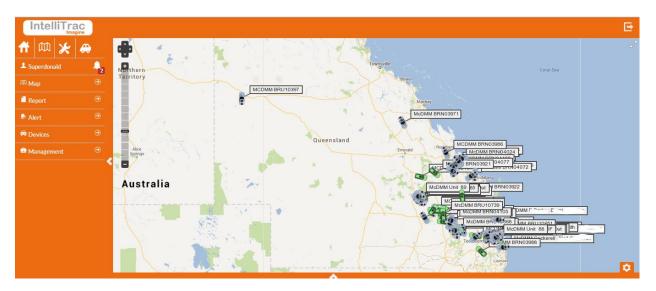
# 12.0 Viewing and Claiming Alerts

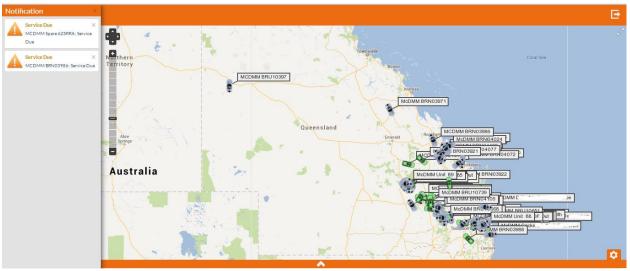
The Intellitrac system provides a flexible method of generating and actioning alerts.

Alerts may include:-

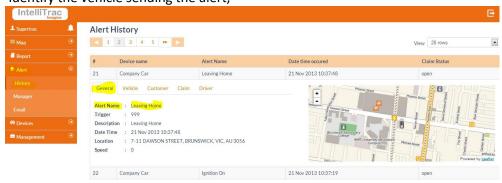
- Security Alerts:- Such as Alarms Triggering, Duress Buttons, Man Down Alerts, Vehicle exiting depots outside work hours
- Fleet Activity Alerts:- Such as Vehicle Due for Service, Vehicle has not completed a required route or job on time.
- Council Works Alerts:- Such as Dumped rubbish requires clearing

Alerts will automatically pop up on any logged PC screens as they occur. By clicking on an alert, detailed information is provided in the window pane below the table.

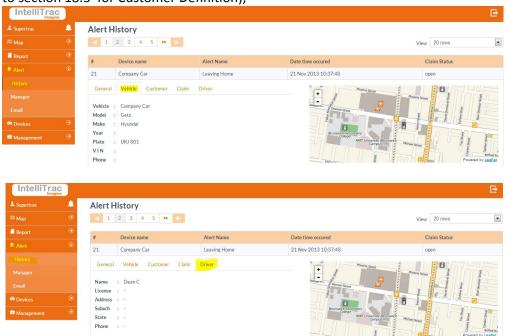




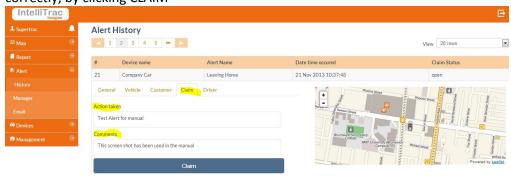
By running through a four step tabbed process, we may:-Identify the vehicle sending the alert,

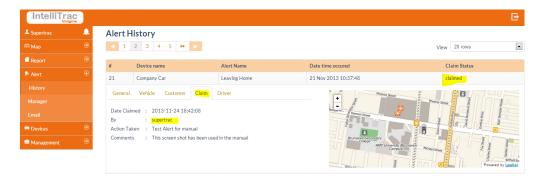


View the vehicle, driver and customer's details, security passwords and any comments such as actions to take (Refer to section 18.3 for Customer Definition),



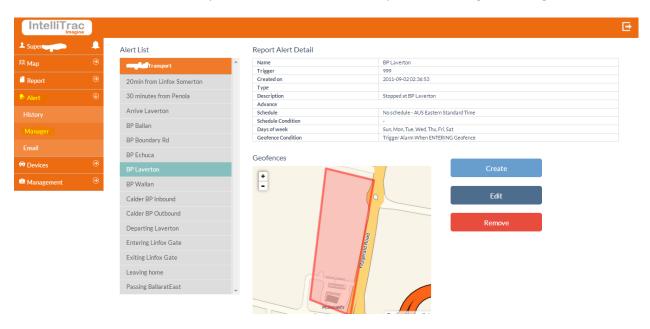
and once action is taken comments may be entered and the alert may be closed as completed and actioned correctly, by clicking CLAIM





# 13.0 Defining Alerts

Alerts are defined based on many conditions. Below we will explain an existing alert using the Edit function.

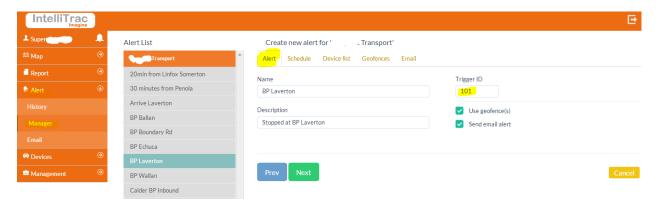


The alert name is BP Laverton.

The alert will generate an email to relevant persons whenever the vehicle is stopped at BP Laverton

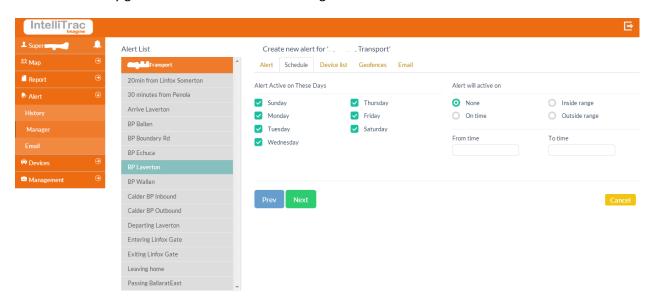
- We name the Alert "BP Laverton"
- We Describe the Alert as "Stopped at BP Laverton" ..this can be a more elaborate description of the alert.
- The Trigger ID is 101. This is a code which is sent whenever the Vehicle Engine is Switched Off.
- The Message Trigger is "Left Blank" This is the actual text message sent by the Vehicle Data Terminal.
- The Email Template used to send emails is "Low Tree Canopy" (explained in section 14)
- The Schedule suggests that this alert is active all days and at all times.

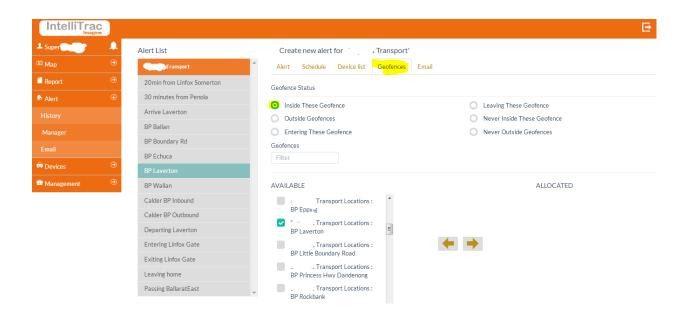
In summary we are defining an alert named "BP Laverton", that will activate on the condition that "No Messages are sent by the driver using the in vehicle data display unit" and the vehicle ignition is switched off when the vehicle is within the geofence BP Laverton on any day of the week and any time of day.



#### We further refine the alert by adding another condition as follows:-

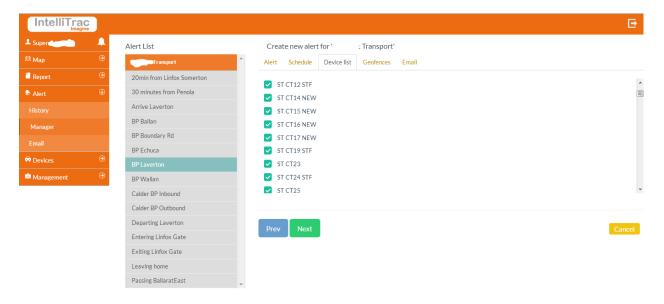
The alert will only generate if the vehicle switches ignition off INSIDE the Geofence "BP Laverton"





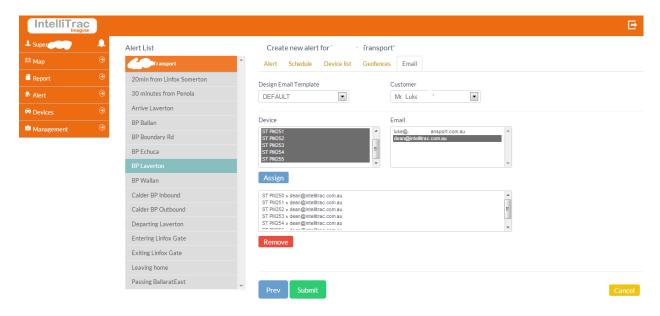
#### We further refine the alert by adding another condition as follows:-

The alert will only generate for the following vehicles.



#### We then define which persons receive the email for each vehicle.

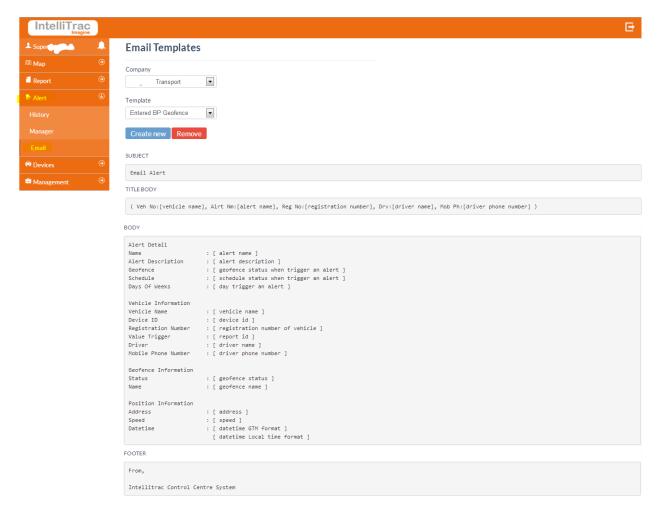
Therefore we select a vehicle and an email and add it to the list. This must be done for all combinations of vehicles and emails as required.



Refer to section 18.3 regarding the definition of Customer Contact and Email Selection.

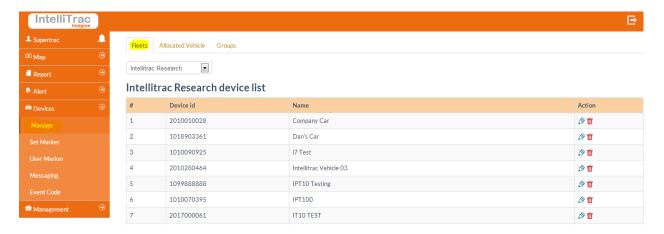
# 14.0 Email Templates

Email templates used for alerts may be customised to suit each alert process. Headers, body and footers may be added to each email template.

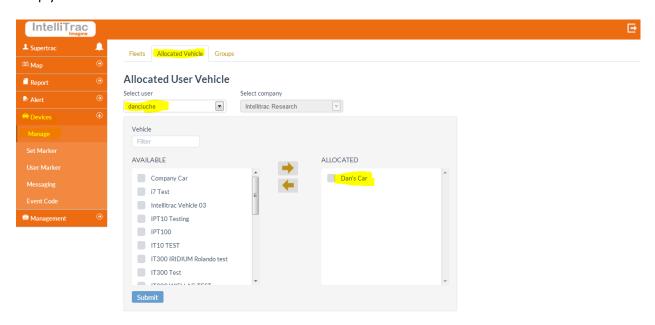


#### 15.0 User Allocations and Passwords

Users with administrative privileges may allocate vehicles to each user in their fleet.



Simply select the user and then allocate available vehicles to the user and click submit.



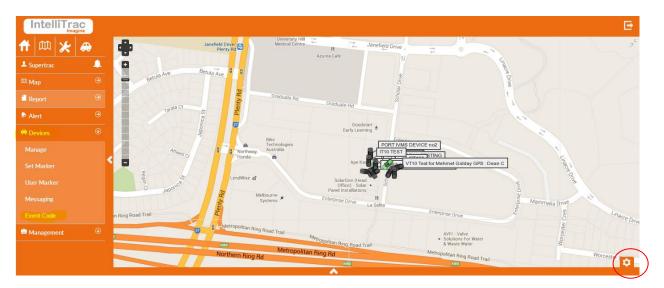
#### To change your password



# 16.0 Event Codes - Report Id Code

Each position sent by a tracking device is defined by an event ID. These event ID's are selectable for display in:-

- Map Grid Below the Map on the Main Tracking Page (please use the icon to select)
- Report Columns

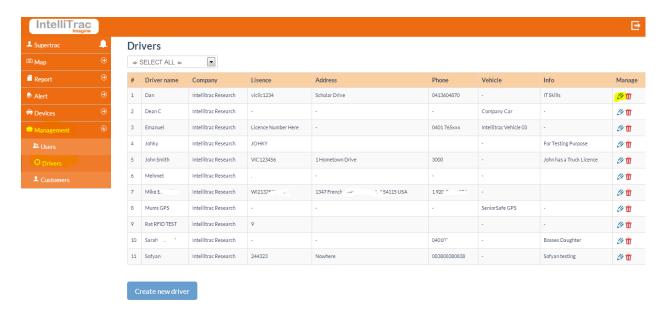


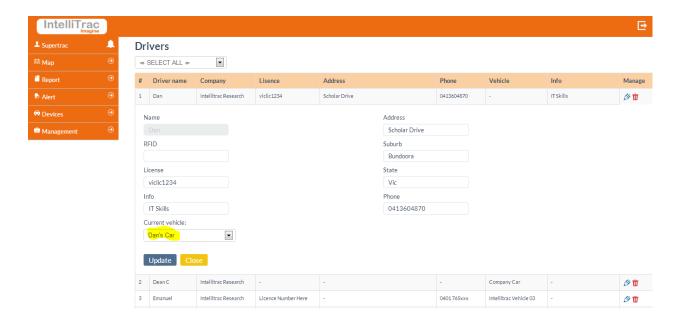
See an example below.



# 17.0 Driver Manager

The Driver Manager provides a method of allocating of drivers to vehicles, so that a report may be generated to determine which driver was driving a vehicle on a certain day, or in the case of personal tracking devices which employee was allocated a personal tracking device on a certain day.





Enter the employee details in the fields provided and manually allocate the employee to a "Current Vehicle".

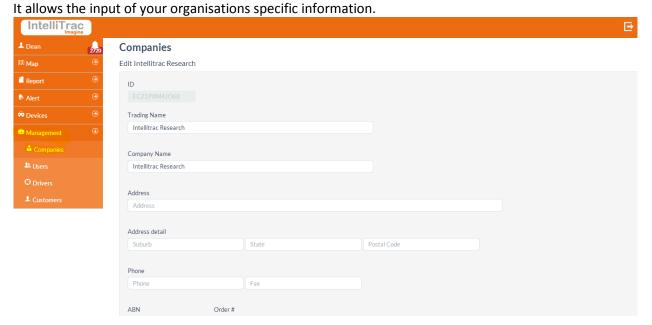
Automatic Driver Allocation is available as follows:-

Ross has also been allocated a Driver ID Tag with serial number 7451957E. Therefore when Ross enters a vehicle equipped with a Driver ID reader, he is forced to swipe his ID card to automatically allocate him to driving the vehicle. He will be unallocated as the driver of the previous vehicle, since a person can only drive one vehicle at a time. Therefore if using DriverID Tagging it is advisable to install RFID readers in all vehicles.

# 18.0 Administrator - Fleet Management

## 18.1 Company/Organisation Details

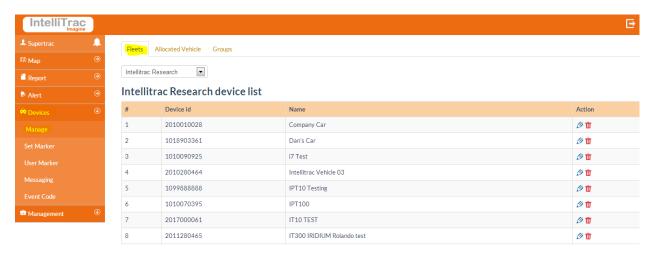
This menu is only available to users with Administration or SuperUser Privileges.



#### 18.2 Fleet & GPS Device Details

This menu item displays all devices allocated to the Company. It allows SuperUsers to:-

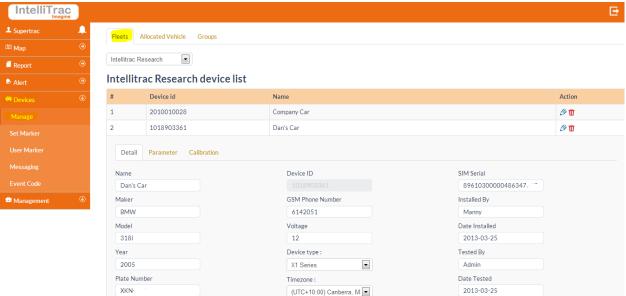
- Add new devices
- Delete existing devices (Warning!!!!! Do not delete devices with active sim cards)
- Modify Properties of Existing Devices



To view or modify the properties of an existing device Click.

The following Screen will display

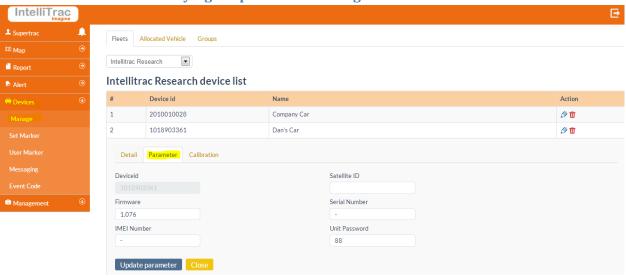




## 18.2.1 Modifying Properties of Existing Devices - Vehicle Name and Details

- Name:- Name of the device as it appears in reports and on the map screen
- Maker:- Make of vehicle
- Model:- Model Of vehicle
- Year:- Year of vehicle
- Vin:- Vehicle Identification number from Manufacturers Compliance Plate
- Voltage:- 12V or 24V
- Device ID:- Assigned by IntelliTrac Head Office cannot be altered
- GSM Phone Number:- Telephone number of the sim card inserted in the GPS Device
- Date Installed
- Installed By
- Tested By
- Device Type:- Select a model from the IntelliTrac Family of Products
- Time Zone:- Time zone where this vehicle will operate
- Has MDT:- Does this device have a data terminal attached
- Ignition Marker:- Which device input wire is detecting ignition status?

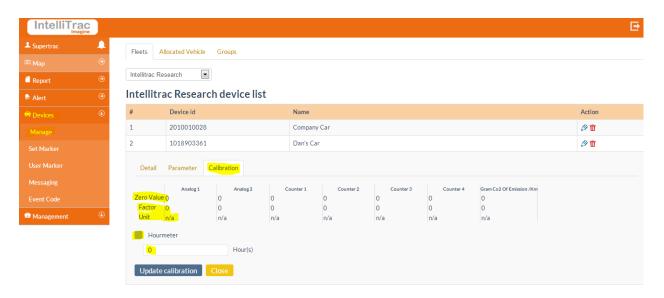
## 18.2.2 Modifying Properties of Existing Devices - Device Details & Calibrations



The Parameter tab provides further device management information such as:-

- Manufacturing Serial Number- For Batch Traceability
- Device IMEI Number For Device identification on Mobile Networks
- Firmware Revision Internal Device Software versions
- Unit Password For device "anti hacking" security
- Satellite ID For Iridium Add on Modems

#### **Device Calibration**



- Analog 1 Converts input 1 Analog voltage to a meaningful information. For example if a temperature sensor was connected to Input 1 and the temperature sensor read
  - o -50 deg C at 0V
  - o 0 deg C at 5V
  - +50 deg C at 10V
    - The Zero Value would be 5
    - The factor would be 0.1V = 1 deg C
    - Unit would be Degrees C
- Analog 2 Same as analog 1 but applies to Input 2. For example if a fuel tank transducer was connected to Input 2 and the sensor read
  - o 0 litres at 12 Volt
  - o 240 Litres at 0V
    - The Zero value would be 12
    - The calibration factor -0.05 volt per litre
    - Unit would be Litres
- Counter 1 4 Counts pulses on input 1 to Input 4

For example if a sweeper timer module is connected to input 2 and the time pulses once every 30 seconds when the sweeper is in operation. Zero Value is 0 (or the existing hour meter value on the machine), Factor = 30 (for Unit = seconds) or 0.5 (for unit = minutes) or (0.008633 for unit = hours).

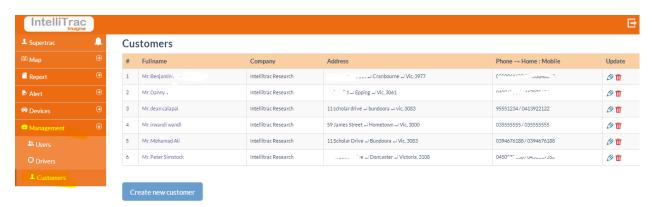
Grams Co2/Km Value is used to calculate Carbon emissions.

Hourmeter – Calibrate the machine hourmeter here (for devices that calculate hour meter within the server software rather than the device hardware)

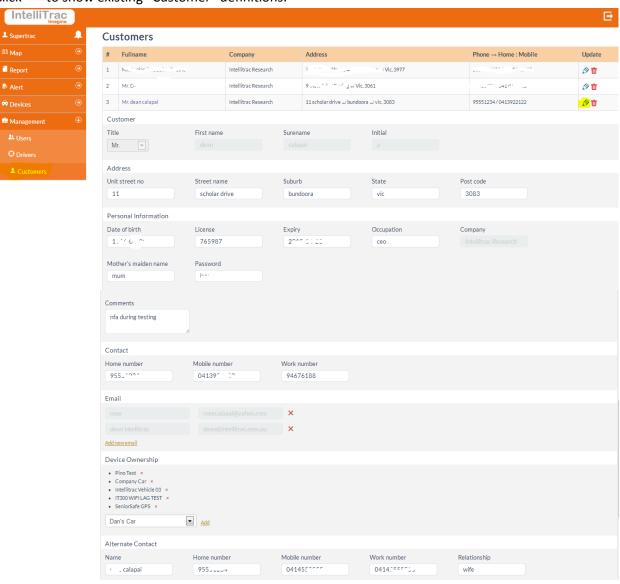
### 18.3 Customer Details - Relates to vehicle ownership and email alerts

The Customers Tab is used to identify the owner of the vehicle, and their contact details, alert procedures and email addresses.

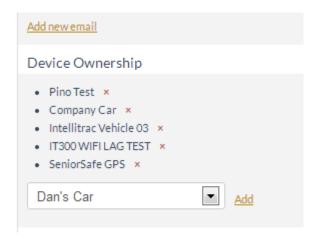
The "Customers" tab will display a list of "Customers" or owners



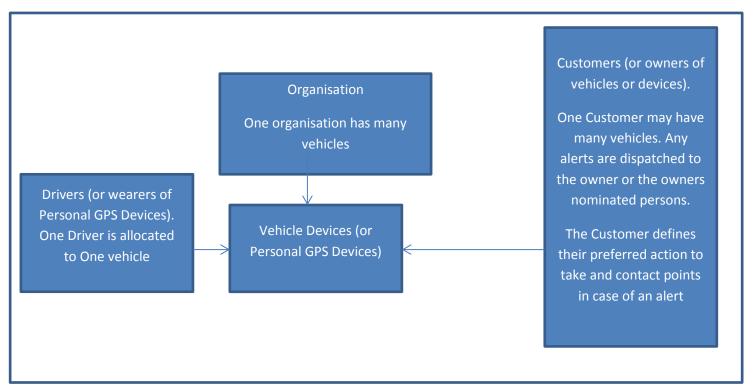
Click to show existing "Customer" definitions.



Click "Device Ownership" to show or allocate which vehicles in the fleet are "Owned" by the customer.



The Relationships are as follows:-



Refer to Section 12 Alerts for details of interrelation of "Customer"

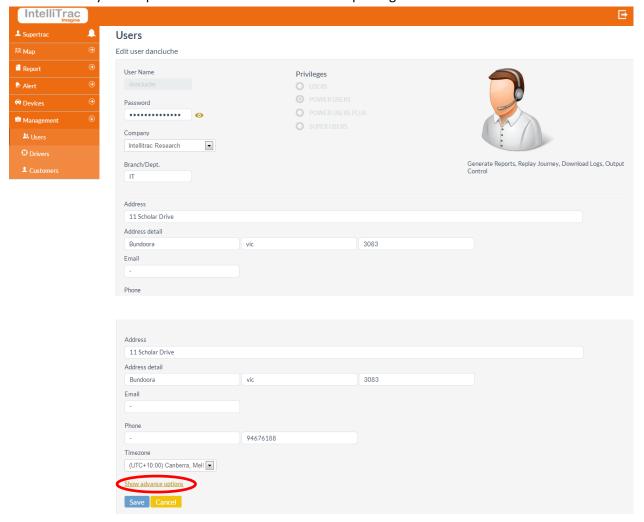
## **18.4** Software Users - Defining Usernames and Passwords

Click on the "Users" tab to display all software users. See below



Click and the following screen will display.

Enter or modify the required details and select the user's privileges.



#### Advanced User Options:-

Such as Privacy settings, user time zone settings and user features.

